ABSTRACT OF THE DISCLOSURE

A transmission diversity detection system can detect presence or absence of a STTD transmission diversity by simply arithmetic operation. The transmission diversity detection circuit notifies presence or absence of a transmission diversity of spread spectrum communication by modulation of SCH. The transmission diversity detection circuit includes arithmetic means for calculating a calculated value of $C_{2n,0} \times S_{2n,0}^{*} + C_{2n,0}^{*} \times S_{2n,0} + C_{2n,1}^{*} \times C_{2n,1}$, in first and second symbols in a predetermined number of series of slots with respect to a reception signal, taking a primary CPICH symbol with respect to the first symbol as $C_{2n,0}$, a SCH symbol with respect to the first symbol as $S_{2n,0}$, a primary CPICH symbol with respect to the second symbol as $C_{2n,1}$ and a SCH symbol with respect to the second symbol as $S_{2n,1}$, taking a complex conjugate of the primary CPICH symbol $C_{2n,0}$ as $C_{2n,0}^{*}$, a complex conjugate of SCH symbol $S_{2n,0}$ as $S_{2n.0}^{*}$, a complex conjugate of the primary CPICH symbol $C_{2n,1}$ as $C_{2n,1}^{*}$ and a complex conjugate of the SCH symbol $S_{2n,1}$ as $S_{2n,1}^{*}$ and judgment means for making judgment whether transmission diversity is present or not depending upon positive or negative of the calculated value.